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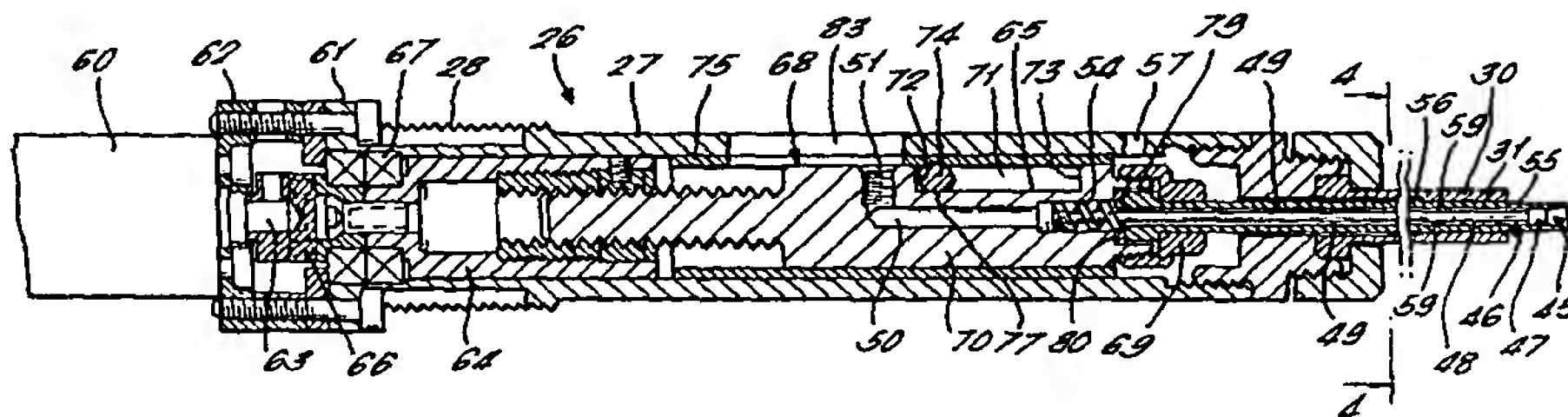
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(54) Title: **GAS NOZZLE AND APPARATUS FOR GAS-ASSISTED INJECTION MOULDING**



(57) Abstract: A nozzle (26) for supplying/relieving pressurized gas in gas assisted injection moulding of plastics material, comprises a body member (27) adapted to be mounted in a mould (9) having a mould cavity (13), a portion of the body member or an extension (30) thereof extending into an opening (44) in the mould which at least communicates with the mould cavity. A sleeve member (31) is mounted for sliding movement in a bore in the extending portion of the body member between an extended position in which one end of the sleeve projects beyond the extending portion of the body member into the mould cavity, and a retracted position, said one end of the sleeve defining a valve port (45) for an inner valve member (46). Attachment means supply pressurized gas to the inside of the sleeve whereby the inner valve member is movable into a valve port open position by the pressurized gas. An electric motor (60) preferably moves the sleeve between its extended and its retracted positions. A gap (56) is provided between the adjacent wall of the sleeve and the extending portion of the body member, the gap being closed to the mould cavity when the sleeve member is extended and open to the mould cavity when the sleeve member is retracted, whereby in the retracted position of the sleeve, the pressurized gas within the mould cavity can vent to atmosphere. There is also provided an apparatus for gas-assisted injection moulding including the nozzle (26).

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